The Educational Weekly.

The Union of Seven Leading Educational Monthlies in the Western States.

EDITOR:—Prest. WM. F. PHELPS, State Normal School, Whitewater, Wis.
MANAGING EDITOR:—S. R. WINCHELL, Chicago.

CONTENTS OF THIS NUMBER.

CHICAGO, THURSDAY, JANUARY 3, 1878.

Editorial.

WITH the present issue, THE EDUCATIONAL WEEKLY enters upon the second year of its existence. What may have been considered one year ago measurably an experiment is to-day an accomplished fact. The trial year is past. It has been settled that courage, vigor, and independence in educational journalism are in accordance with the "spirit of the age," and that this spirit will not permit an enterprise of this kind to become a corpse. It has been settled that live issues and not state platitudes are the things demanded by live educators. It has been proved that freshness and fearlessness of style are possible in the treatment of educational questions as well as other questions, and that such treatment is the most likely to arrest attention, and stimulate to that hearty and united action so clearly demanded by the best interests of the republic. Nor is it any longer a question that these grave topics may be so presented as to challenge the consideration alike of the professional and the general reader. Education being a matter of universal concern, being linked inseparably with the individual and the national welfare and destiny, should ever be a subject of absorbing interest to all. That its supreme importance is yearly becoming more apparent is, we think, attested by the increasing prominence it receives in the daily press, in the periodical literature of the day, on the rostrum, in popular deliberative assemblies, in social science associations, and in the halls of legislation both of the state and the nation.

In this grand onward movement *educators themselves* should be prepared to become the worthy, trustful leaders and guides. The rights and prerogatives of the profession should be claimed and exercised. The talents, character, and attainments of those who teach and those who superintend should ever be such as to command respect, inspire confidence, and secure hearty coöperation. The knowledge, professional skill, and potent influence of the expert in educational science should be made to permeate every department of administration and effort from the local school board to the head of the system. Until this condition shall be fulfilled, incompetency, inefficiency, and comparative failure must continue to discourage and depress. To this cardinal doctrine the WEEKLY will ever be loyal, and to the necessity of *a radical educational service reform* it will in the future, as in the past, give the most earnest heed. That in these efforts it will be cordially and generously supported, there remains no longer a reasonable doubt. It will seek its own interests in honestly and faithfully endeavoring to serve those of education and of educators. Believing that the use of the best materials and the exercise of *good taste* in the mechanical execution and in the arrangement of the matter will themselves prove to be valuable educational forces to those who read its pages, the WEEKLY will seek every legitimate means of beautifying and perfecting its outward appearance, as well as of invigorating and strengthening its animating soul. With these convictions and purposes, and with the sincere salutation of "A Happy New Year" to its noble army of readers and friends, it moves forward to the struggles and the victories of another campaign.

No relations of a public nature can be more intimate than those of a teacher to his pupils, and none can be more important than those which he sustains to the agencies and influences that prepare him for his work. Hence no relations ought to be more cordial than those between the normal schools and every part of that common school system whose mission and purpose are "to secure competent instruction to every child that shall be born." In the absence of such relations, the normal school as a public institution has no justification for its existence, or if they be merely nominal, if they exist only in theory, then will both the teachers' seminary and the common school system be shorn of their strength. Said the eminent French statesman, Guizot, in speaking upon this identical subject, "*The prosperity of the teachers' seminary will be the measure of the success of the people's schools.*" He further declares that *without ample provision for the training of teachers, nothing can be done to improve elementary instruction.*

The importance of this subject is not so thoroughly appreciated either by the school officials or the people as it should be. In some communities, indeed, the normal schools are regarded as excrescences upon the common school system, and have been thus characterized in legislative bodies called upon to act in their behalf. In other places it has been asserted that they are hostile to the interests of the public schools and are treated as competitors with them for the public support. Superintendents have misrepresented them in their official reports; political conventions have anathematized them as frauds; demagogues have denounced them as expensive luxuries; and "high-toned" journalists as "horse-leeches" and cheats. Within the last two years their very existence has been menaced even in communities where their *status* has been regarded as the most perfectly and permanently assured. Nearly forty years of reasonably fair success in our own country, with more than a hundred and fifty years in Europe, have not sufficed to make their merits appreciated and their necessity felt by the average citizen of the "Great Republic." It is important, therefore, that the relations really

existing between the teachers' seminary and the teachers' work, between the normal and the common school, should be carefully considered and fully understood. To this end a brief discussion of the subject will be undertaken in succeeding numbers of the WEEKLY.

The educational meetings at Madison, held December 26—28, were well attended, and there was a good interest throughout. The various reports and papers were carefully and ably prepared in accordance with the programme published in the WEEKLY. These reports and papers were followed by thorough and vigorous discussions. One very sensible and important feature was the consideration given to the subject of our country schools, and a course of study for the same. The paper on "Compulsory Education" presented the subject in a fresh and candid manner. The report on "Exhibitory Department of the Association" was favorable to that scheme, and it was decided to make a trial of the same at the next annual session, next summer. There was no written report on kindergarten culture, but the subject was very ably discussed. The paper on the "Relations of the Normal Schools to the Common School System of the State," was a carefully and ably prepared document. The "Report on Drawing in the Common Schools" was pronounced by competent judges as an unusually able paper on that subject. We were not present at the remainder of the session, but we learn that it was of the same high order as that mentioned. The Convention of County and City Superintendents was the best meeting of that body that we have attended for years. Notwithstanding the difficulties and disadvantages which the Principals' Association had to meet, the meeting was, nevertheless, profitable. E.

THE SPELLING REFORM—ITS ELEMENTS OF SUCCESS.

Mrs. M. E. WALKER, Chicago.

HAVING set forth last week the objects to be obtained as the result of the spelling reform, we next note its

ELEMENTS OF SUCCESS.

Clearly comprehending the gigantic work before us, we ask what elements of success does it contain?

First, we claim that the origin and growth of language insure the *simple representation of the spoken word.*

When man was made a social being, to him was given the power of speech, by him was understood the revelation of speech. That musical instrument, the voice, set in tune by the great Maker, obeyed the will of man, and its coupled companion, the ear, caught up the strains and communicated them to the intelligent soul. God spake and man responded. The tongue found out its cunning and the ear was pricked with its melody. Spoken language is the wonderful gift from God. When social intercourse was interrupted by the scattering of the people, material things took on a new significance, and were employed as tokens of love or hatred, remembrance or revenge, and life or death, and the deft hand found out its handiwork and shaped after the First Master its lifeless but still expressive copy; or taught by the traceries of the Divine Teacher in frost and stone and mirroring waters penciled its rude copy of material things, or symbolized the emotions of the mind and aspirations of the soul. Thus taught by God came forth sculpture and painting, representing both the seen and the unseen. And man looked upon his own work and pronounced it wonderful. But the spur of progress still urges on. From dove, and image, and painting, the idea of *representation* bursts forth in glory, and spreads its broad wing over the fast receding past and the far-reaching future, linking together the generations that were, and are, and are to be, by faithful record. The dead past can no longer bury its dead, but the great and good, redeemed from the short life of existence and tradition, are ever with us in "thoughts that breathe and words that burn." From crude hieroglyphic, with unnumbered symbols, representing the ideas of the mind or the impulses of the voice, has grown out, nourished by the progress and enlightenment of the ages, the *art of writing.* And civilized nations with one accord go back from ideography to that great first factor in language, the voice, and analyze its powers and on them found its written language. And how few and simple are the units which enter into this wonderful art. Less than fifty simple sounds for all tongues. Less than fifty simple symbols for the pens of all people.

Oh, that again the genius of man had been taught alone of God! But no. The commotions of war, the mandates of tyrants, and the swords of conquerors stamp their impress on the young art, and warp and distort its elements by strange and incongruous relations. And out of this chaos, born of war and forced alliances, comes to us our cherished English. Cherished,—I speak not in derision, for as dear to us as the land of our liberty are the accents of our mother tongue. But the English *written* language is not the boast of the English speaking people. Indeed it has never been recognized by them as the exponent of their speech, and the judgment and discrimination of this enlightened people can be traced in the pruning and purifying of its language. And, to-day, we find ourselves in the midst of this glorious work. British or American, the world looks on and holds us responsible for the errors we wink at. Why stand we thus idle? Are we so conservative that we will blind our eyes to the light of our times? The harvest is already full, and will yield its fruit—into the lap of this generation if she will but receive it; if not, into the fertile ground of the years to come.

Though scattered by the winds of scoff and derision, though blighted by prejudice and ignorance, and chilled and stunted in the drought of conservatism, the germs of *great first principles* ever grow, ever live. And over and above the groping and doubting and repelling of this generation shall flourish and mature this idea of *simple, faithful representation,* out of which has grown sculpture, painting, and writing.

Recognizing the voice as the instrument of speech, its powers become the matters of representation. Indeed, in the enlightenment of the nineteenth century, no system but a phonic system of writing would be deemed practicable. Based on such a system our English writing is supposed to be. Why then shall it not follow the lead of its companion, and as the voice rings out its melodious changes, the hand keep time with its faithful symbols? It will. Down before the march of simple representation must fall the barriers of ignorance, the idols of prejudice, and the bulwarks of conservatism. The only question for us is whether we will march with the triumphal procession, or be trampled in the ruin and dust of our tottering fortifications. There is no delusion in this. When we trace the line of the past and the course of the present we have two points in establishing the line of the future, and sooner will the proposition for a straight line fail than the immutable laws of progress. Again, the times are auspicious for the great work of purifying the English language. The present advancement of the work gives a precedent for future action. Statistics can be furnished showing the cor-

rection of hundreds of words within the past century. It shall be my effort at some future time to give the public a list of these changes. Let the incredulous refer to the prefaces of Webster's Dictionary, and see what *one* man accomplished in this work; and let the still incredulous compare Webster's first dictionary with the volume that now bears his name. When the conviction once comes home to us that we are not undertaking a new thing, but that we may aid in accelerating the speed of this glorious work, we shall be heartily ready to join hands in the movement.

Again, the attention which has been called to this subject for the last twenty-five years has convinced the minds of our eminently practical people of the inconsistencies of the present system. The mind of the nation, as it were, is directed to the tax imposed on childhood by the one study of the orthography of the words of our language; not as a science, but merely to memorize the *spelling*. Some one has estimated that eleven years of the student's life must be devoted to this work. And then how unsatisfactory the results! For whether he write or speak, the dictionary must keep him company. From the first lesson at school, to the grave, he is never a success in the one thing, of being master of his vernacular. Educators, to remedy this evil, to outflank the enemy as it were, have within the last twenty years laid particular emphasis on phonic drill as the basis of primary instruction. This becomes at once a factor in the accomplishment of a reform in spelling. Our schools now present a rising generation not unacquainted with the simple sounds which unite to form words—or the processes by which they are discovered—and the phonic analysis which once sounded so strangely to our ears has become as familiar as our *abc's*. Not only this, but by the use of diacritical marks, we have been taught to represent those sounds, so that the letters of a word have come to be considered as perfect, only so far as they represent its phonic elements. The glory of the originators and promulgators of this work brightens as we see the result to which it tends. By a careful survey and comparison of our words, we also discover that etymology, rather than hinder, helps on to the consummation of this work. The Latin, from which directly or indirectly such a large proportion of our words are taken, is far ahead of our language, in adherence to the principles which we have shown to be fundamental in spelling. Its clear intelligible words will suffer no material change in this reform.

Again, the times are auspicious because of the peace relations between the nations that speak the English language. Peace nourishes the arts and sciences, and the means of intercommunication render the rapid exchange of ideas possible. Besides, the liberty of free thought and speech guaranteed by our government, and recognized in the policy of the British sovereign, insures the concentration of active minds in overcoming error and establishing right.

Finally, the old system fails because it contains elements of its own destruction. It is inconsistent, unscientific, and in every part wanting.

It purports to be based on the representation of the voice, but it ignores its impulses, and grants the license of substitution or interchange to the characters which represent its sounds, and this without rule or law, or conformity to the genius of any language. It proposes to furnish an alphabet for writing these sounds, but this is both redundant and defective. It contains some rules for the use of the alphabet, but these are rendered powerless by outweighing exceptions. It makes a faint show of law in the adoption of foreign words, but admits the grossest barbarisms and vacillates between pronunciation and spelling.

Is it not thus shown that speech as the gift of God must find a counterpart in the art of man? That the two powers of the voice, sound and impulse, are the matters for representation, the latter the guide to syllabication, the former to spelling? That the work of purifying the English language, begun and carried on so effectively by our ancestors, now devolves upon us? and that the present status of things points to its speedy consummation?

That we may at once attack the grossest errors, I offer the following resolutions and ask the attention of educational meetings everywhere to the points which they cover.

Resolved, That we acknowledge the propriety of discarding all superfluous letters in spelling, and that such a practice is hereby recommended.

Resolved, That the substitution of one letter to represent the sound of another is detrimental, and that the abolishment of such a practice is hereby recommended.

GRUBE'S METHOD.—II.

II—EXERCISES ON EXAMPLES WITH APPLIED NUMBERS.

Prof. LOUIS SOLDAN, Principal of the St. Louis Normal School.

IN THE following, Mr. Grube gives but the outline, the skeleton as it were, of his method, trusting that the teacher will supply the rest. The sign of division, as will be explained below, should be read at the beginning: "From . . . I can take away . . . — times." By this way of reading, the connection between subtraction and division becomes evident.

FIRST STEP.

The number One.

"As arithmetic consists in reciprocal 'measuring' (comparing), it cannot commence with the number 1, as there is nothing to measure it with, except itself as the absolute measure."

I. The abstract (pure) number.

One finger, *one* line; one is once one.

The scholars learn to write:

| 1

| 1×1=1

II. The applied number.

What is to be found *once*, in the room, at home, on the human body?

SECOND STEP.

The number Two.

I. The pure number.

a. Measuring (comparing).

| | 2.

| 1 | 1+1=2. 2×1=2.

| 1 | 2−1=1. 2÷1=2. (Read: From 2 I can take away 1 twice.)

2 is one more than 1.
1 is one less than 2.
2 is the double of 1, or twice 1.
1 is one-half of 2.

b. Practice in solving examples rapidly. 1+1=? 2−1=? 2÷1=? 1+1−1×2=? etc.

c. Combinations.

What number is contained twice in 2?
2 is the double of what number?
Of what number is 1 one-half?
Which number must I double to get 2?
I know a number that has in it one more than one. Which is it?
What number have I to add to 1 in order to get 2?

II. Applied numbers.

Fred had two dimes, and bought cherries for one dime How many dimes had he left?

A slate-pencil costs 1 cent. How much will 2 slate-pencils cost?

Charles had a marble, and his sister had twice as many. How many did she have?

How many one-cent stamps can you buy for 2 cents?

THIRD STEP.

The number Three.

I. The pure number.

a. Measuring.

(1) By 1.

| | | | 3.

| 1 | 1+1+1=3.
| 1 | 3×1=3.
| 1 | 3−1−1=1. (Better than 3−1−1−1=0.)
for, 3−1=2, 2−1=1.
| 1 | 3÷1=3.

This ought to be read: From 3 I can take away 1 3 times, or, in three, 1 is contained three times. The ideas of "to be taken away" and "to be contained" must always precede the higher and more difficult conception of dividing.

(2) Measuring by 2.

| | 2+1=3, 1+2=3.
1×2+1=3.
| 3−2=1, 3−1=2.
3÷2=1 (1 remainder).

(From 3, I can take away 2 once, and 1 will remain; or, In three, 2 is contained once and one over.)

3 is 1 more than 2, 3 is 2 more than 1.
2 is 1 less than 3, 2 is 1 more than 1.
1 is 2 less than 3, 1 is 1 less than 2.
3 is three times 1.
1 is the third part of 3.
1 and 1 are equal numbers, 1 and 2, as well as 2 and 3 are unequal.
Of what equal or what unequal numbers does 3 consist, therefore? etc.

b. Practice in solving examples rapidly.

How many are 3−1−1+2 divided by 1?
1+1+1−2+1+1−2+1+1? 3×1−2×1+1+1−2+1+1? etc.
The answers must be given immediately.

No mistakes can arise as to the meaning of these examples; the question whether 3+1−2 means (3×1)−2 or 3×(1−2) is answered by the fact that these examples represent oral work and that it is supposed that the operation indicated by the first two numbers (3×1) is completed mentally before the next number is given.

c. Combinations.

From what number can you take twice 1 and still keep 1?
What number is three times 1?
I put down a number once, and again, and again once, and get 3; what number did I put down 3 times?

II. Applied numbers.

How many cents must you have to buy a three-cent stamp?
Annie had to get a pound of tea for 2 dollars. Her mother gave her 3 dollars. How much money must Annie bring back?
Charles read one line in his primer, his sister read 2 lines more than he did. How many lines did she read.
If one slate-pencil costs one cent, how much will 3 slate-pencils cost?
Bertha found in her garden 3 violets, and took them to her parents. How can she divide them between father and mother?

FOURTH STEP.

The number Four.

I. The pure number.

a. Measuring.

(1) By I.

| | | | 4.

| 1 | 1+1+1+1=4 (1+1=2, 2+1=3).
| 1 | 4×1=4.
| 1 | 4−1−1−1=1.
| 1 | 4÷1=4.

(2). Measuring by 2.

| | 2 | 2+2=4.
2×2=4.
| | 2 | 4−2=2.
4÷2=2.

(3). Measuring by 3.

| | | 3 | 3+1=4, 1+3=4.
1×3+1=4.
| 1 | 4−3=1, 4−1=3,
4÷3=1 (1 remainder).

(In 4, 3 is contained once and 1 over; or from 4 I can take away 3 once, and one remains.)

Name animals with 4 legs and with 2 legs.

Wagons and vehicles with 1 wheel, 2, and 4 wheels. Compare them.

4 is 1 more than 3, 2 more than 2, 3 more than 1.
3 is 1 less than 4, 1 more than 2, 2 more than 1.
2 is 2 less than 4, 1 less than 3, 1 more than 1.
1 is 3 less than 4, 2 less than 3, 1 less than 2.
4 is 4 times 1, twice 2.
1 is the fourth part of 4, 2 one-half of 4.
Of what equal and unequal numbers can we form the number 4?

b. Problems for rapid solution.

2×2−3+2×1+1−2×2?
4−1−1+1+1−3, how many less than 4? etc.

c. Combinations,

What number must I double to get 4?
Four is twice what number?
Of what number is 2 one-half?
Of what number is 1 the fourth part?
What number can be taken twice from 4?
What number is 3 more than 1?
How much have I to add to the half of 4 to get 4?
Half of 4 is how many times one less than 3? etc.

II. Applied numbers.

Caroline had 4 pinks in her flower-pot, which she neglected very much. For this reason, one day one of the flowers had withered, the second day another, and the following day one more. How many flowers did Caroline keep?

How many dollars are 2+2 dollars?
Three apples and one apple?

4 quarts = 1 gallon.

Annie bought a gallon of milk, how many quarts did she have?
She paid 1 dime for the quart, how many dimes did she pay for the gallon?

4 { . quart, . quart, . quart, . quart, } 4 { | dime. | dime. | dime. | dime.

What part of 1 gallon is 1 quart?
If 1 quart costs 2 dimes, can you get a gallon for 4 dimes?
A cook used a gallon of milk in 4 days. How much did she use each day?

The recitations should be made interesting and animated by frequently varying the mode of illustration, and in this the ingenuity of the teacher and her inventive power can display themselves to their best advantage. It is of course superfluous to describe the infinite variety of objects which may be used, but a few suggestions will perhaps prove acceptable. Those illustrations which compel the whole class to be active, or which are of special interest and arouse the attention of pupils are of greater value than others. For instance: "Class, raise two fingers of your right hand; two fingers of your left hand. How many fingers have you raised? Two fingers and two fingers are how many? Two and two are how many? Carrie may show to the class with her fingers that two and two are four." This plan of illustrating should be used very frequently, as it requires the whole class to be active. The following illustration is also commendable as it hardly ever fails to enlist the interest of the class; every pupil likes to be allowed to illustrate a problem in this way: "From four I can take away two how many times? Emma may show that her answer is correct by making some of the other girls stand. (The class know that those whom Emma teaches must stand until she makes them take their seats again.) Emma: Four little girls are standing here. From 4 little girls I can take away 2 little girls once (making two of the four take their seats) twice (making the other two sit down). From 4 little girls, I can take away 2 little girls twice. From 4 I can take away 2 twice. 4÷2=2."

FIFTH STEP.

The number Five.

1. The pure number.

a. Measuring.

(1) By one.

| | | | | | 5.

| 1 | 1+1+1+1+1=5.
| 1 | 5×1=5.
| 1 | 5−1−1−1−1=1.
| 1 | 5÷1=5.
| 1

(2) with 2.

| | 2 | 2+2+1=5.
| | 2 | 2×2+1=5.
| 1 | 5−2−2=1.
5÷2=2 (1 remainder).

(3) with 3.

| | | 3 | 3+2=5, 2+3=5.
| | 2 | 1×3+2=5.
5−3=2, 5−2=3.
5÷3=1 (2 remainder).

(4) with 4.

| | | | 4 | 4+1=5, 1+4=5.
| 1 | 1×4+1=5.
5−4=1, 5−1=4.
5÷4=1 (1 remainder).

The fingers are the best means of illustration here: "Hold up your left hand. How many fingers are you holding up? Hold the thumb away from the other fin-

gers. How many fingers here? (1); here? (4). 1 finger taken from 5 fingers leaves how many fingers? 1 from 5=? 4 fingers+1 finger=? 4+1=? Hold your first finger and the thumb away from the other fingers. 5—2=? 3+2=? 2+3=?" etc.

5 is one more than 4, 5 is 2 more than 3, 5 is 3 more than 2, 5 is 4 more than 1. (All the solutions to these examples are the result of observation from illustrations placed before the eyes of the class; without them this kind of instruction is worthless.)

4 is 1 less than 5, 4 is 1 more than 3, etc.

3 is 2 less than 5, etc.

5=5×1.

1=⅕×5 (1 is the fifth part of five).

5 consists of two unequal numbers, 3+2. 5 consists of two equal numbers and one unequal number, 2+2+1.

b. Practice in the rapid solution of examples. (It would be a great mistake to drill on the same example until the pupils can remember it. Such a practice would be worse than valueless; every example should be a new one to the pupil.)

5—2—3+2×2, one half of it less 1, taken 5 times?

2×2+1—3×1×2—3+4? etc.

c. Combinations.

What number is one fifth of 5? How many must I add to 3 to get 5? How many must be taken away from 5 to get 3? How many times two have I added to 1 in order to get 5? I have taken away twice 2 from a certain number, and 1 remained. What number was it? etc.

The East.

BOSTON LETTER.—NO. VI.

THERE is nothing, with the sole exception of genial friends, which so enlivens and cheers and enhances the value of a home as a collection of well-chosen books, placed in a comfortable room, and made accessible to all. They speak *volumes* for the intelligence, culture, large-heartedness and hospitality of their possessor; for only an intelligent man cares for many books; none but a man of culture can select them; none but a generous one will invest his money where so little hard profit is returned; and a hospitable man alone will provide for his guests so unusual and unexpected a treat.

A large house and rich furniture suggest no more than wealth. Pictures indicate taste, and feed the mind of an appreciative few. A piano is an exhaustless fountain of pleasure; but only when skillful fingers and merry hearts and moments of leisure combine. But a real home library is ever at your service. It accommodates itself to the capacities and fancy of all. It speaks in monosyllables to little children. It discourses in philosophic terms to the aged and the wise; it laughs with the gay, consoles the sorrowing, and has its special message to every one. A man's books are generally the gauge of his intelligence. A well-instructed man may be too poor to own a dozen volumes, or even one expensive work; but he will have two or three old favorites which have been handed down from the past, retained, may be, since his school-days, externally shabby, like himself, but rich in their contents, and which have had a potent influence to make him the thoughtful man he is.

On the other hand, we occasionally find a man with many books; but at a glance we see that his selection constitutes the library of a pedant and an intellectual sham, and is in no sense the exponent of a cultivated mind. So we cannot make a universal rule, that the character of a man's mind may be estimated by his books; but it is a good general rule. If we knew what books a man likes, and desires, and seeks for, we could gauge him better. But in this land of diffused wealth and of low-priced publications, nearly all can possess the writings of the authors which they especially value. If a man has not books, it is usually safe to infer that he cares not for them. If he has one class of books, and not others, we conclude that thus his preference guides him. If his collection be miscellaneous, we think his mind is so; and if such a miscellany includes good works, outside of his own probable researches, we presume that he is liberal enough to think of others, and provide for them.

How often we have thus deciphered the character of a man about whom we had little previous knowledge. Chance brought us to his library. This was better than a phrenological chart. Every book was an organ, the size of which we could easily make out. But, unlike the phrenologist, we could tell little by issolated examples, whether we call them organs or books. We must both analyze and combine. A pedant might have Emerson but he would not have Emerson, Jeremy Taylor, and Edwards, side-by-side. He might have Tyndall because it is fashionable now-a-days to know what Tyndall thinks; but he wouldn't flank him by Bishop Butler on the right and Peabody of Cambridge on the left. He might have Herbert Spencer, and so would the profound scholar; but the latter would have Plato, also, and Sir William Hamilton. He might have Scott, but would not be quite so likely to have Kingsley, nor even Thackeray. He would sooner have Byron than Spenser, Tennyson than Mrs. Browning, Poe, or Bert Harte than Whittier.

Every book-collector is to some extent a bibliophilist. Some are almos wholly so. They analyze books externally, as the mineralogist, who is not also a chemist, does the minerals which he finds. They value a book for its age or for its rarity, or for its mechanical excellence. They would rather not use these pets than to soil them. They love rather to look at their books, as they are arranged in tasteful lines upon the shelves, than ever to look into them; but if they take them down and open them, the illuminated title-page is what givet them the most satisfaction. They love to talk about books, as books, and no about the treasured wisdom they contain.

Such a library reveals its author as quickly as any other. It shows him neither a pedant nor a scholar. His specialty necessitates a certain kind of very respectable information. He is at the same time the favorite and the terror of book-sellers; for while he lavishes his money upon books, he knows their market value too well to allow for them more than their actual worth. To the close inspection of such a cabinet of literature, none but the connoisseur feels welcome. Indeed, such a collection is not often placed in the way of folks; but in some more retired corner of the house. If, however, in consideration of its value as an ornament, it be less secluded, the glass doors are securely locked; nor would any one uninvited wish to take a book, lest by dropping it an incalculable value might be extinguished.

Evidently a book's true worth is in direct ratio to its actual service to the mind; but that every studious man should almost personify to himself these wonderful repositories of the world's wisdom, and make them the objects of a sentimental regard, akin to the affection we feel for his living and thinking companions, is not surprising. We naturally love whatever intelligently and freely blesses us. We love the edifying and helpful minister. We love the brave soldier who has saved our land. We love him who guides us to any desirable truth, though the only enshrinement of his intellect and heart which the world possesses be a book. It is natural and reasonable, then, to cherish and almost love a great man's book for what it contains; not because it is rare or beautiful; but because it brings instruction to the mind, and liberty, love, and life to the heart.

Entire communities can be very accurately judged by the number and kind of books scattered among them. Villages or towns can be compared in this way in respect to culture. I know some large and pretentious places where scarcely anything which may be called a library is to be found. I know other communities, where almost every house has a handsome collection of good books. A public library may owe its origin and support to the enterprise of a few, or even one munificent citizen. Such an institution may long remain in a place where it is not appreciated nor respected; yet a community so favored would to the general observer far out-shine others too poor to have such a public possession, but whose small and choice libraries in nearly every house proclaim a higher state of refinement.

It is often curious to note how libraries are built up. To the pedant his books may come as suddenly as came the whim to proclaim himself a scholar. To the man of wealth and fashion books come with other things which adorn a gentleman's house. The mere book-fancier gathers his treasures rapidly or slowly, according to outward circumstances. But the scholar's library always accumulates slowly. It is the counterpart of his ever-growing stock of knowledge. Its foundations were laid, perchance, in his studious childhood. Here you can trace the pathway through his elementary, academic, and, if perchance it winds among classical walls, through his collegiate and professional periods, better than anywhere else. His books have become grand facts in the history of his life, and he preserves them as almost a part of himself. Every page is as valuable to him for what it suggests as for what it literally contains. Here is a note, which the professor dictated, penciled on the margin; there is one somewhat less instructive, but of equal historic value, which a witty class-mate scribbled; further on is the scene of a notable "smash," and near that a passage never to be forgotten, which was given him on examination day, and which proved to him the arena of a signal victory.

These text-books for earnest study are but specimens of the completed collection, so far as the maturing scholar builds it for his specific uses. But he is not forgetful of others. Some purchases also he may laudably make for mere mental relaxation. The gifts of friends find lodgment in his shelves. His children's books make their way there. The critical scholar rebels. To be sure the library is his own; but his tools and his playthings are sadly mixed. There must be an overhauling and a thorough selection. He must have his mine of learning cleared of all obstacles and made more accessible and available. Fiction and poetry, history epitomized, and science popularized, illustrated books, and all books for general reading, must be eliminated and deposited elsewhere. Hence a perfect colonization of books in the sunniest room below. How glad the children are! Now they can look at pictures from morning until night, and read aloud, disturbing nobody. And what a charming assortment. It is the *ne plus ultra* of a private library. Not a dry or dull book remains. All these discarded volumes have been selected by the scholar's care and approved by his taste. He prizes them still as much as ever, and gives them a large share of his leisure, and delights to see his family and his visitors thriving upon their sweet and enriching contents.

Notes.

GENERAL.—The youth who study science now have a great advantage over their fathers. Books on scientific subjects are written more simply, and the experiments suggested are less costly than the older ones. A further improvement has been devised by preparing cheap sets of apparatus for the illustration of an entire branch of science. In carrying out this plan with respect to electrical science, the well-known work of Professor Tyndall has been followed, and apparatus is provided to execute each of the experiments he describes. Any of the pieces of the apparatus can be bought separately at an average of about a dollar apiece; the whole set for that science costing $55. With such apparatus in his hands, a student learns to think and operate far more effectively than with costly machines which he is rarely permitted to use. The system has been developed in New York and already has been found of good service in the furtherance of intelligent educational work; the apparatus being neatly made, presents an atractive appearance, and helps to interest the scholar in the care and management of the tools of science.—— A whaling steamship, the Vega, has been bought for the Swedish Arctic Expedition, which is to start next July from Gothenburg. The vessel is very strongly built, and can carry coal enough for a cruise of 8,000 miles; she is to be supplied with sufficient provisions to serve for three years. Captain Palander will be in command; less than thirty persons will be on board, in all; three or four will constitute the scientific corps. The King of Sweden, the Government, Oscar Dickson, of Gothenberg, and Mr. Sibariakoff (a Russian), conjointly defray the expenses. The projected voyage will be eastward from Novaya Zemlya, along the Siberian coast, down through Behring Strait; coming back around Asia and via the Suez Canal. This will circumnavigate both Europe and Asia.

LITERARY.—One of the latest devices of A. H. Andrews & Co., of this city, is a series of designs in drawing published first, with neatness and precision, on the wide frames of some noiseless slates which they manufacture, and then in a handsome little book, in which, as in case of the four slates, the designs are carefully graded to suit the progress of the pupil; and one of the wonders about these beautiful designs is the extremely low price at which they have offered to furnish them—only 25 cents for the *Drawing Book*, 65 cents for the Drawing Book and Slate No. I. or No. II., 70 cents for the Book and either of the two other slates; or $1.70 for a set of the slates. They are all sent with postage or express charges paid in full. There are over 150 pictures in outline on these slates, after drawings by A. F. Brooks. The first is elementary, the second present the outlines of common objects and animals, the third architectural outlines, and the fourth classic and floral. *The Child's First Drawing Book*, as the little book is called, is bound in a beautiful cover in four colors on plate paper. In this connection it may be well to state that the same firm have manufactured and have for sale a large supply of accurate and attractive kindergarten gifts and occupation material.

REVIEWS.

Elementary Free-hand Geometrical Drawing.
Elementary Projection Drawing.
Elementary Linear Perspective of Forms and Shadows.

By S. Edward Warren, Ph. D., Professor of Drawing in the Massachusetts Institute of Technology. (New York: John Wiley & Son.)—The three little manuals before us are part of a set which we have known and used for some years. They are in the main well arranged, are minute and accurate in detail, and contain many practical hints on points too often left for the suggestion of the skillful teacher, or yet more often for the discovery of the ingenious pupil. The problems are well stated, and their executions are methodical and accurate. The drawings, both on wood and on stone, have the decided merit that they are too rude to be imitated, so that the pupil, finding plenty of opportunity, will have abundant incentive to make better.

Manuals of drawing are mainly for the teacher, and not for the pupil. Elementary problems, of which many good examples are here found, may be prepared from a text, and be demonstrated in the class-room like the theorems of geometry, but this is true only of elementary work. Principles thus theoretically established should be applied immediately in some form of practical construction; these may be best illustrated by the instructor upon the blackboard as dictation exercises, followed by the pupil upon his drawing-board. The two lessons most difficult for the pupil in drawing are, to measure, and to be accurate. It was once said by way of derision of a certain workman, "He is a good carpenter, but he can't measure!" Effective lessons in measuring are such only as require one to make something, and these same lessons inculcate the habit of accuracy. The average boy will not believe that the width of a pencil stroke has value until he has spoiled a few constructions which might have delighted him, but now annoy because he failed to lay down with care a few initial points. Geometrical constructions, otherwise tedious, acquire absorbing interest when they are seen to lead directly to some practical result. For instance, the problem of inscribing in a circle three equal circles mutually tangent is but a dry and rattling skeleton; when a few added curves develop from the result a tre-foiled gothic window, the dry bones become clothed with life and beauty. The struggle with the difficult points becomes the joyous wrestling of the athlete, and the issue is victory. Pupils trained only in free-hand drawing acquire careless habits in measuring, especially when sketching ruins, rocks, trees, or other irregular figures. The thing might as well have been this way as that; the rock may be longer or broader and be just as useful; the squared ashlar must conform to given dimensions, or it will not fit its place in the wall. A single octagon may not show very distinctly slight variations in its sides or angles; a tessellated pavement of combined octagons and squares must be drawn accurately, or its slight deficiencies become glaring defects.

A greater number of practical examples, such as we have suggested, interspersed among the problems of these books might interfere with the elegant synopses which seem to delight the author, but they would add something to the real utility which the manuals now possess. We cheerfully commend them as useful text-books in their several specialties.

PAMPHLETS RECEIVED.

BIENNIAL *Report of the Superintendent of Public Instruction*, to the Seventeenth General Assembly of the State of Iowa. C. W. von Cœlln, Superintendent of Public Instruction.

Annual Report of the Board of Education of Jerseyville, Illinois, with Rules and Course of Study, August 1, 1877. J. Pike, Superintendent of Schools.

Catalogue of the Public Library of East Saginaw, Michigan. Compiled by W. L. Smith, Librarian. Published by order of the Board of Education, 1878, pp. 73.

Correspondence.

THAT LITERARY BUREAU.

TO THE EDITOR OF THE WEEKLY:

I HAVE ever had the profoundest respect for bureaus.—My mother's bureau, with its ponderous glass knobs, is one of the first objects of my recollection. My great veneration for that article of furniture evidently very largely grew out of the inherent power of those knobs promptly to overcome the momentum often generated in my little head, and measured by the product of its mass and its velocity. Insignificant as are the factors of this momentum, my respect for the bureau became great. Various and valuable were the offices performed by that revered institution. I am sorry now to realize that a change has come over "the spirit of my dreams." Not that I love that old familiar bureau less, but rather that other institutions much less lovable and of much less worth have assumed the same dear honored name.

Of one of these I would now make mention. It bears a formidable name—even the "Western Literary Bureau." It presumptuously thrusts its private, confidential circular into the hands of students whose names it can secure from printed catalogues of our literary institutions. Thus it flaunts before unsuspecting youth its wonderful "inwardness," fostering the disastrous irregularities of those who are ill-disposed, and leading into temptation those who are not. It addresses itself especially "To Students." It magnanimously offers them "graduation essays or orations" "at reasonable rates," and these, too, "at a liberal discount" "where the services of the Bureau have been employed during the school course." "The Bureau is pledged not to betray the confidence of its patrons," in "small caps." The happy student patron, whose "absence of talent is recognized," and who has "not had the necessary discipline," is charged to inclose with his order his "last or best original essay" that "his style may be studied." The circular itself might appropriately be sold as an illustrative essay on "Beauty," "terms invariably in advance."

Now, Mr. Editor, in the name of "Western education" I do most respectfully suggest to the proprietor of this "Western Bureau" that he, at his earliest convenience, do tack securely upon the face of this piece of furniture his best funeral "sermon," crawl quietly into its smallest drawer, stretching himself out therein at full length, placing upon his forehead a "name, (fictitious if desired)," pillowing his head upon his essay entitled "Greatness," letting one heel rest upon "Perverted Gifts," and the other upon "Soul Power," and employing as his winding-sheet a blanket fabricated out of his essays on "Discipline," "Eloquence," "Inspiration," and "Progress," with "Little Things" as a center piece.

For additional gratuitous information apply to the "Bureau."

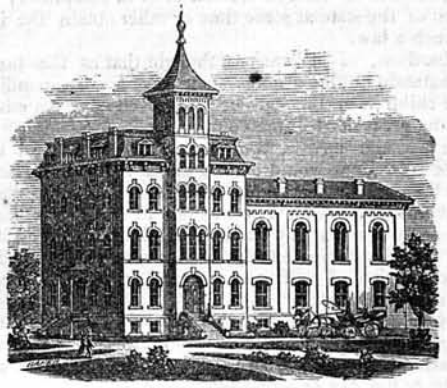
Respectfully,

CARTHAGE, ILL., DEC. 20, 1877. L. F. M. EASTERDAY.

NOTES BY THE WAY.

DOWNER'S GROVE—NAPERVILLE—SANDWICH—LELAND—MENDOTA.

DOWNER'S GROVE is a flourishing little village in Du Page county. Dr. J. R. Haggard has lately been elected Superintendent of the county schools. He is thoroughly alive to the work of teaching and will do good service for old Du Page. Three teachers are employed in the public schools here. Mr. J. K. Rassweiler, a graduate of the Northwestern College, is principal. The schools are among the best in the county. An institute was recently held here which was attended by about 60 teachers. Prest. Newton Bateman and others lectured.



NORTHWESTERN COLLEGE.

Naperville used to be the county seat of Du Page. This is the town that contains the institution known as the Northwestern College, under the auspices of the Methodist Evangelical Association.

There were four hundred students in attendance last year, and this year the number will exceed that. The faculty is as follows: Rev. A. A. Smith, Rev. F. W. Heidner, H. C. Smith, H. H. Rassweiler, Rev. A. Huelster, C. F. Rassweiler, G. W. Sindlinger, Rev. J. G. Cross, Edith A. Gibbs, C. D. Wilber, Minnie P. Cody, and Mrs. N. C. Knickerbocker. Rev. Wm. Huelster is treasurer. Prof. Heidner is the author of the German text-books used in the Chicago public schools. He is now making a careful revision of his two books first published. No extra charge is made to students for instruction in German. Prof. Smith has lately published a work on psychology. Rev. J. G. Cross enjoys a wide reputation as an artist. The gentlemen students of the College maintain a library and reading-room. The ladies have a similar apartment given up to fine art and wholesome literature. Many of Illinois' best teachers go out from this institution. Eight different societies are maintained among the students. Two of these are German. The Y. M. C. A. is doing a good work. We have not space to mention the many fine features of this flourishing institution.

At Sandwich, Leigh's Pronouncing Charts are used. Those who do not believe in this kind of reform have patronized a private school, taught by Mrs. De McInnes. Supt. Bourne is an advocate of the phonetic reform, also of the metric system. He is not alone in his convictions. Let us have more of this work in our schools.

At Leland we met the genial Bathurst who made our stay home-like. Prof. L. B. Hudson, the elocutionist, gave a reading that evening. Prof. Bathurst is fortunate in having three well qualified assistants. Not often in a village of this size do we find all of the needed virtues which make the true teacher. Miss E. Sadie Hughes has charge of the intermediate school. Much of the work is original. Miss Hurd, who has already acquired fame as an elocutionist, teaches the grammar school. Prof. B. is a good disciplinarian. He has occupied this position for more than seven years.

At Mendota, J. R. McGregor is principal of the East-side public schools, and on the West-side, the Blackstone school is under the principalship of Wm. Jenkins, formerly of Ottawa, Ill. There are eleven teachers employed upon the East-side, including a teacher of German. In the primary and intermediate departments a critic or supervisory teacher is employed, who assists, directs, suggests, teaches, etc. Three teachers are employed upon each floor; the critic being one of the three (most experienced) has a room which opens into both of the other rooms which adjoin each other. Miss Mary A. Vincent has charge of the primary work; Miss Mary J. Stevens of the intermediate school. Prof. McGregor believes in method and system, as is everywhere apparent. At the Blackstone school we were cordially met by Prof. Jenkins who introduced us to his efficient corps of lady assistants, eight in number. The school goes like clock work. The system of monthly examinations pursued is an excellent one. The principal enters largely into this work. A German teacher is kept at work teaching German the full school day. A fine chart, giving the metric system complete, was found in use in one of these rooms. Miss M. E. Vaughn and Miss A. I. Love are teachers in the higher department. Miss Maggie M. Kane, who has taught several years in the primary, now has charge of the third room. Prof. Jenkins has one of the best teachers' libraries in the state. He is thoroughly in earnest in the work of teaching and the good results attest the success of his labors thus far for Mendota. Thirteen copies of the WEEKLY are taken here.

A. H. PORTER.

—There are 17,000 children between four and six years of age in the public schools of New York city.

QUERIES AND ANSWERS.

TO CORRESPONDENTS.—Make your answers as brief as possible and not sacrifice clearness. Never send an answer or a question on a postal card. Never make any cancellation marks in your solutions. Always revise your answer before sending, to see that it is perfectly clear and containing no errors. The shortest and best answers will be published in preference to others. Questions will be republished for six weeks if no answer is received. When it is possible, send your own answer when you send the query.

QUERIES.

JANUARY 3, 1878.

1. What sea was formerly the commercial highway of nations, and what may be termed so now?

2. What are the latest discoveries made in exploring the unknown regions near the North Pole? the South Pole? Give dates of discovery and by whom made. Why is the region around the *North* Pole more an object of investigation than that around the opposite part of the globe? LIBRA.

3. Friction increases as the pressure increases, also as the surfaces in contact are more extensive. So says philosophy. Is this so where both the surfaces in contact are hard and smooth? To draw a block of marble 4 feet long, 6 feet thick, 3 feet wide, which side should be placed down to need the least power, both surfaces being smooth? Q.

QUINCY, MICH.

4. Four persons live at the respective contiguous corners of a public square on which stands a school house to which A has to go 30 rods, B 40 rods and C 50 rods. What distance does D live from the school-house? D. H. D.

5. Where, when, and by whom was the first vessel built in America?

6. Does the Society of Cincinnati exist at the present time? Who is its president now?

7. Who was the author of the so-called Monroe Doctrine?

8. Did the Panama Congress ever hold a session?

9. Which shall we accept as the date of the settlement of New York, 1614 or 1623?

10. When did we acquire Florida? J. M. D.

ANSWERS.

E. M. Glasgow, p. 343 of WEEKLY, asks for a rule for pronouncing family names in zoölogy. Such names have always the accent on the antepenult, the *i* of the terminæ *idæ* being short in quantity, thus: *Pa-pil-i-ón-i-dæ*, *Ca-rábi-dæ*, etc. O. S. W.

77. The plane of the ecliptic is oblique to the plane of the equator, and consequently oblique to the plane of every parallel of latitude. And though the angle of inclination (23½°) is less than the latitude of the beholder, yet so great is the distance of the sun from the earth, that the direction of a line drawn from the beholder to the point in the ecliptic where the sun is setting, is north of west.

A small deflection (23½°) produces a great departure in the long distance of 92,000,000 millions of miles, and this departure is northward when the sun is north of the equator. H.

In his solution of No. 60 "Cedar" asks, "Are there no new ones?" Now my idea of the object of the "Queries and Answers" column was not to see how much we could puzzle each other, but to obtain better solutions and explanations for the difficult problems we now have, in order that we may present the best methods to our pupils. Now I have a problem which I cannot solve in a manner satisfactory to myself. "Cedar" will find the problem in Robinson's Practical Arithmetic. It is this: A man bought a farm for $3,000, agreeing to pay principal and interest in five equal annual payments, what will be the annual payment if he pay interest at 7 per cent? Now the problem may be easily solved by this formula:

$$a=\frac{(r-1)S}{r^n-1},$$

which I find in my higher algebra, but are pupils just finishing practical arithmetic supposed to be able to deduce formulas like that? Or, is there a simpler solution? If not, I think the author made a mistake in introducing the problem. OMEGA.

LAKE SUPERIOR, Dec. 26, 1877.

ANSWER TO QUERY 71, VOL. II.

IS THE solution of 71 as given by A on page 359, vol. II., general, or will it apply only in a few special cases where the lines connecting the tops of the towers happen to form an isosceles triangle? Suppose we take the heights of the respective towers at 30, 50, and 60 feet; the triangle which he terms A will then not be isosceles, and we think his method of solution will have to be essentially modified before he can find the length of ladder to reach the top of each.

A general solution may be effected as follows: Let s= side of equilateral triangle; let a, b, c represent the height of the respective towers, and let x= length of ladder. From these terms we obtain the following general formula which will readily solve any similar example:

$$x=\sqrt{\left\{\frac{(2s^2+a^2+b^2+c^2)^2+3(a^4+b^4+c^4)-6(a^2b^2+b^2c^2+a^2c^2)}{12s^2}\right\}}$$

Taking the numerical values of the letters as given in the original example, we readily find x=122.5401 feet.

If we take the heights of the respective towers at 30, 50, and 60 feet, we find the length of ladder to be 125.95113 feet.

D. H. DAVISON.

Educational Intelligence.

CHICAGO, JANUARY 3, 1878.

WISCONSIN.

MINUTES OF THE SEMI-ANNUAL SESSION OF THE WISCONSIN TEACHERS' ASSOCIATION HELD AT MADISON, DEC. 26–28, 1877.

WEDNESDAY EVENING:—The Association convened at the Capitol, in the Agricultural Rooms, and was called to order by the president, James MacAlister, of Milwaukee. The session was opened with prayer by Prest. W. C. Whitford of Milton.

Prest. Whitford presented the first paper on the programme, subject, "Our Country Schools." The paper described the condition of the average country school in terms that were plain and unmistakable. The schools are in a most deplorable condition of inefficiency. The great question to be solved is how to remedy this inefficiency and place the schools of the rural district in a state of prosperity.

The reading of this paper was followed by a discussion which was opened by Supt. Searing. Prof. Searing subscribed to all that had been said by Prest. Whitford, but was disappointed that no suggestions for a practical reform had been made. The average country school is now worse than it was a quarter of a century ago. Teachers are less apt to teach now than then. This condition of affairs is partly brought about by the action of the graded schools in taking the best of the teachers from the country to the cities and villages. How can these abuses be reformed? 1. Would have the teachers' wages raised, to a large extent by a state tax. 2. A stricter supervision must kill the competition now existing between the good and the poor teachers.

Supt. Walker of Manitowoc thought that is was possible for county superintendents to get along without encouraging poor teachers and discouraging good ones by issuing licenses to teach. Let no limited certificates be granted. There are none granted in Manitowoc county. There are only teachers enough to fill the schools.

Mr. Reynolds, New Lisbon, thought that the want of organization is responsible for poor schools; that the schools are as good now as at any previous time; that the fault is in the old district system of organization; and that the township will prove the remedy. Mr. Reynolds thinks that the crowding out of male teachers and substituting females has had a bad effect on the schools.

Mr. O. S. Wescott, of Racine, thought it a hard question, but that the schools are not so bad as they are said to be.

Assist. Supt. Pradt, said we must look at the question as it exists in Wisconsin and not as it is in New York or elsewhere. The antagonism of individuals in the district will ever be an insurmountable barrier to efficient schools.

Mr. Shaw, of Madison, thought the higher studies an injury rather than a benefit to the schools. The curriculum must be cut down rather than extended.

Prest. Albee, of Oshkosh, said the management of the diverse nationalities in our schools was the difficult point in the question. The management by a democracy is not to be carried too far. The township system is the thing.

Mr. Emery, of Ft. Atkinson, thought the township system was not adopted and was unsuccessful because the law was made permissory instead of obligatory.

Supt. Searing approved of the township system but considered it hopeless; where it has been tried it has not given satisfaction.

Prest. Parker, of River Falls, said that legislation would never solve the problem. The work must begin farther down. There must be personal, persistent effort with the masses of the people. Let the superintendents, teachers, and institute conductors do this work.

Mr. MacAlister, of Milwaukee, thought a committee should be appointed to present the question to the legislature.

Prest. Whitford said he wished to provoke discussion on the subject. He was an earnest friend of the township system, but is not sure it has been successful where tried. An educational basis for suffrage has been proposed, but is not feasible.

Mr. MacAlister was appointed a committee to confer with the Governor in relation to a room for future sessions of the Association.

Adjourned till 9 to-morrow morning.

Thursday Morning, Dec. 27.—Mr. MacAlister reported that it would not be possible to meet in either the Senate or the Assembly Chamber.

Mr. T. P. Maryatt of Kenosha, read a paper on "The Question of Compulsory Education." Mr. Maryatt favors the passage of a compulsory law, and would have its provisions rigid and strictly enforced. The chief point in the paper was the advocacy of an educational basis for the exercise of suffrage.

Supt. Searing opened the discussion. He thought one of the most hopeful signs of the times is in the growing conviction of the people that an educational qualification for suffrage is necessary.

The only objection to a compulsory law is the impossibility of enforcing it. Could it be executed, he would be in favor of such an enactment. As a matter of fact, there is no need in Wisconsin of a compulsory law, as nearly all the children of the state at some time or other obtain the instruction contemplated by such a law.

Mr. Richardson, of Milwaukee, thought that as the tax-payers are compelled to maintain public schools, they have a corresponding right to insist that all the children of the state be sent to school. An educational basis for suffrage is the great need of the country.

Mr. Emery asked how a compulsory law that could not be enforced in Michigan or New York would exert a moral influence in South Carolina. He would like the gentlemen who are advocating such a measure to answer.

Mr. Hutchins of Fond du Lac was not in favor of a compulsory law but will vote for any law that any teacher will draft, provided it be satisfactory to the author. He has never seen a teacher who could draft such a law. He thought the question of suffrage a political question that teachers, as such, as should not meddle with.

Mr. Clark thought that if schools are provided, education should be compulsory. He is willing to pay his taxes if children are obliged to go to school.

Supt. Searing is sure the whole school system must be reorganized before any compulsory law can be successful.

Mr. Maryatt thought the laws already enacted have been too lenient.

Mr. Walker was not in favor of a suffrage limitation. He asked how a law can be effective unless public sentiment will uphold it.

Mr. Walthers, of Milwaukee, said such a law is impossble and strongly endorsed Supt. Searing. Voluntary association must diffuse public sentiment, and then there will be no necessity for compulsion.

Mr. Chandler, of Sun Prairie, said the people are not interested in the subject.. He hoped all the points of the case would be well considered. The statistics of Wisconsin do not show whether or not an alarming illiteracy exists.

Mr. McGregor, of Platteville, thought that not much would be gained by such a law, considering the inefficient condition of the country schools spoken of by gentlemen in the debate on the condition of our country schools. Teachers must do the work by personal effort; he opposed all legislation.

The "Report on an Exhibitory Department for the Association" was submitted by O. S. Wescott, of Racine. The report favored the establishment of such a department and contained a scheme for its organization. After a spirited debate participated in by Messrs. Salisbury, Wescott, MacAlister, Whitford, Johnson, Parsons, Harvey, Albee, Charlton, Roby, and Bascom, the following resolution, presented by Mr. Thayer, of River Falls, was adopted.

"*Resolved*, That the report on an Exhibitory Department for the Association be referred back to the committee for further consideration, to report at the summer meeting of the Association." The committee were further instructed to prepare and place on exhibition at the summer meeting of the Association, such work as may be sent in by the different schools of the state.

Prest. Albee, in behalf of the committee on "Kindergarten Culture," stated that the committee had no report to make. The discussion of this subject was made the first order for the evening session. The president was instructed to pay the expense of the Association for a place of meeting. Adjourned to meet at the City Hall at 7 P. M.

Thursday Evening, Dec. 27—The discussion on "Kindergarten Culutre" was opened by Prest. Albee, of Oshkosh. The old system of education was to place a text-book in the child's hands. Only by learning to read could the child begin culture of mind. The training of the childs mind was supposed to be attained in no other way. Is this the one way, is it the right—the just way? The kindergarten system says that there is another and a better way, a method of mind culture to be best carried on without a book. The difficulty in the system is that our teachers should understand child nature. Were this philosophy of child mind understood by our teachers, this would be the natural beginning of an individual's education.

Mr. Richardson, of Milwaukee, read a paper showing the ends and the means of kindergarten culture, and its adaptability to the public schools. Mr. Richardson is in favor of the introduction of the elements of the kindergarten in all our schools.

Mr. Walthers, of Milwaukee, gave some of his experience as a teacher of the little children. He developed his ideas of this culture from the example of the children themselves. The system must be adapted to the masses.

Prest. Phelps, of Whitewater, read a paper on "The Relations of Normal Schools to the Common School System of the State." Prest. Phelps and Prest. Whitford were requested to furnish a copy of their papers for publication in the *Journal of Education*. The committee on "A State Tax for Schools," submitted the following report through Supt. Searing, its chairman.

"Your Committee respectfully report as follows: An inspection of our state system of public instruction shows the following facts:—1. The income of the school fund is less than one twelfth of the annual cost of the schools. 2. That income has practically reached its maximum amount, and the sum annually distributed for each child of school age (now only forty-one cents) must gradually grow less in the future as the school population increases. 3. The comparatively small amount of the fund is due to the same inconsiderate manner of selling the public school lands, which deprived the University of an ade-

quate endowment, while encouraging immigration to the state. 4. The local taxation for the ordinary support of schools is enormously unequal, varying from 1.35 mills per dollar of the assessed value in Milwaukee to ten or more per cent of that value in some of the newer portions of the state. 5. In consequence, many schools in country districts are necessarily short in duration and poor in character. 6. The state has no easy, economical, and effective means of enforcing such requirements as the good of the school system may demand, such a means as is found in the distribution of the public money on conditions imposed by the Legislature. 7. The great and unnecessarily unequal advantages of the schools are a source of weakness to the school system as a whole. 8. The small amount of material aid given by the state, rendering oppressive to the people the support of schools in its poorer and newer sections, tends to prevent more rapid settlement and is thereby an injury to the development and progress of the state as a whole. In view of these facts, it is recommended that a general tax for common school purposes be imposed upon the property of the state in amount sufficient to yield annually at least as much as the income of the school fund. It is believed that such an increase in the amount of money distributed to the schools directly from the State Treasury would considerably enhance their efficiency, proving a means of securing better teachers; greater equality in the length of school terms; better attendance; uniformity in books; and other conditions upon which the welfare of the school system and of the whole state largely depends. The example and experience of many other states fully support the recommendations herein made, as is shown in the last three annual reports of the State Superintendent.

For the Committee. EDWARD SEARING."

Ordered that discussion on the report be made the second order for to-morrow morning. The president was instructed to invite Prof. Hawkins, of the Northwestern Telegraph Company, to address the Association on the "Telephone." Adjourned to meet in the Senate Chamber to-morrow at 9 A. M.

(Concluded next week.)

CALIFORNIA.—The Superintendent of Public Instruction reports that the number of children in California of school age (between 5 and 17 years) is 200,067; the number enrolled in the public schools, 135,335; the daily average attendance, 89,539; number of teachers in the public schools, 3,167, of whom 1,184 are men, and 1,983 women. It is said that teachers are better paid in California than in any other state. The average salary of men, $84.93 per month; of women, $68.01.

ILLINOIS.—Superintendent Smith, of McLean County, contributes a sensible article to *The Pantagraph*, "Stalling the Teacher." Those of our readers who teach in the country schools understand the significance of the expression. No sooner does a new teacher appear upon the scene than all the old puzzles that adorned the last few pages of the old-time arithmetic are brought to bear. The foolish teacher deems it necessary to demonstrate himself equal to any emergency, so the trouble begins. I should be glad to present the entire article but must content myself with a few extracts. He says: "I have seen a good deal of this 'stalling' business, off and on, boy and man, and I have come to the conclusion that it is bad, thoroughly bad, first, last, and always. During the two years of my superintendency in this county I have known of more than a score of schools that have been ruined by this means. In nearly every case the teachers have been amply qualified to teach the pupils all that the best interests of the school required to be taught. I can call to mind instances in which teachers have been especially well prepared to do the solid drill work of the school-room; and where the work has been well begun by both pupils and teacher, and yet the whole work ruined by the teacher getting 'stalled' on some 'sum' sent in by some one who purposely tried to 'stall the teacher.' * * * * * I have seen big boys, whose every moment of school time ought to be made the most of in practical work, I have seen such pupils sit by the half day together shoving their fingers through their hair, 'fighting' on some mathematical conundrum that did n't amount to a row of pins if they did get it. Time untold is thus wasted every winter; time that might be of immeasurable worth. And how absurd it is to measure a teacher's ability by his power of cracking arithmetical nuts. * * * * * No, no; this whole business is wrong and bad, and ought to be abandoned at once. There may be a time and place for guessing puzzles and trying tricks, but that place is not the school room, and no time that ought to be given to school work should be given to such pastime or nonsense. * * * * * Let the test of the teacher be his absolute success or failure in the straight school-room work, and not his power to guess riddles—as the proof of the good farm hand is his ability to do farm work rather than to pick a puzzle to pieces." The article is timely, and hits the nail upon the head. It has attracted the attention of school authorities and has shown the utter uselessness of a knowledge of these mathematical puzzles. It will go very far toward correcting the evil as far as his county is concerned. We desire to add a word upon the same subject. The fault lies primarily with the teacher. If I attempted to solve all the useless puzzles that are presented for my consideration, I should find my time sadly interfered with. Moreover, if I knew them all I should try to forget them as soon as possible. There is among teachers a foolish hesitation about saying "I do n't know." If a fair problem, one that comes within the range of ordinary school work, is presented for your consideration and is presented with an honest desire for information and not for the purpose of 'stalling' you, entertain it. But if one of the stock puzzles is thrust at you, and with the evident intention of attempting to cripple your influence with your pupils, be quick to admit your ignorance, if ignorant, and add that you have better occupation than showing up the tricks of mathematical jugglers.—— While speaking of the work in McLean Co., it may be worth while to call attention to a plan recently adopted by the superintendent. Let teachers in other localities try the same experiment and report results. He proposes to have a series of questions, upon some important topic, presented to the pupils on Monday morning. They shall find the answers whenever it is most convenient, and on Friday afternoon a half-hour shall be devoted to the exercise of answering them. It is thought that parents can be interested in school work, that pupils can learn to make some use of reference-books, and that whatever is learned in this manner is clear gain, since it need not interfere with regular school work. The first set of questions is here given. "What is the 'Declaration of Independence'? Who wrote it? To what body of men was it submitted? Where had this body met? When did they meet? What called them together? Who was the president of the body? What colonies were represented? On what day was the 'Declaration' adopted? How was the news of its adoption received throughout the colonies? What demonstrations were made in Philadelphia, New York, Boston, and Charleston? How many men signed the document? Give the names of the leading signers. Is the original paper still in existence? Find out all you can about it. Is the building in which the 'Declaration' was signed still standing? Give any facts you can obtain concerning it. Learn the first and last paragraphs of the document. Give five of the reasons stated in the 'Declaration, as a just cause for the course the colonies pursued. Who was the King of England at this time? When was he made King, and how long did he reign? Learn a few of the leading characteristics of this King. If possible, read the 'Declaration of Independence' aloud."

Of the few ladies who have charge of city schools in the Western States, Miss Sarah E. Raymond, of Bloomington, Ill., is one of the most successful. Her first annual report, recently published, shows her to be a lady of fine executive ability, and an efficient superintendent. The schools of Bloomington have been very much improved under her management during the past year.——Of the 102 county superintendents in this state, 39 were reëlected last fall, consequently 63 new ones have now entered upon the duties of that office. There are 4 ladies among them; among those reëlected are 5 ladies, making 9 in all. Two or three good ones were defeated in the election, though we believe competent men were successful.——Prof. Elliot Whipple has resigned the chair of natural sciences at Westfield College, and is to take charge of the public schools of Mishawaka, Ind., in place of E. L. Hallock, who succeeds Prof. Seymour at Blue Island.——From Mr. Fred. O. White, member of the Board of Education at Aurora, we have received the annual report of the Board of district No. 4. We notice that the estimated value of school property is $33,800. There is no indebtedness resting upon the district, and there is a balance in the treasury of $5,770.65. The salary of the Superintendent is $1,600. Eight of the present corps of teachers are graduates of the school. The last graduating class numbered 9; the total number of graduates who have received diplomas from the board is 87. After the test of a competitive examination, Will H. Allaire, of the last class, received the appointment of cadet at West Point from that Congressional District. Enrollment for the year, 691.

INDIANA.—The reports from county superintendents of the public school statistics for the year ending September 1, 1877 give a great amount of information in regard to the condition of the common schools of the state; and the following synopsis and comparisons with former years comprise all points of general interest: There has been a decrease of 17,544 in the number of children enrolled in public schools, as compared with last year. This year the figures range as follows:

	Male.	Female.	Total.
White	261,556	230,419	491,975
Colored	3,375	3,376	6,751
Pupils enrolled during the year			498,726

Children are considered eligible to attend public school from the ages of 6 to 21. Of the total number in the state 76 per cent were enrolled, about the same proportion as in 1876. But the practical school age is from 6 to 16 years, and leaving out of the calculation all miners over 16 would give a percentage at the public schools of nearly 70 per cent of the entire juvenile population. The counties having the best attendance at common schools, in proportion to the number of children, are: Fulton, Hancock, Kosciusko, Noble, and Pike, in each of which counties four out of five of the juvenile population receive education in the common schools. The average daily attendance throughout the state is 298,324 children, equal to 62 per cent of the number enrolled, and 46 per cent of those entitled to school privileges. Vanderburg county shows the best daily average of attendance, being nearly 75 per cent of the children enrolled, while the lowest averages are found in Martin, Morgan, Pike, Crawford, and Daviess counties, all of them below 50 per cent. There are 9,325 school districts in the state. School is taught in 9,289 districts, the counties having the largest number being Allen 180, Kosciusko 155, Wabash 140, while Ohio county stands at the bottom of the list, having only 30 districts. In 36 districts no school was taught last year, four of them being in Huntington county and six in Posey county. There are 13,574 teachers employed in the schools, of which 95 are colored; 8,109 teachers are males and 5,465 females. About 3,000 of these have commenced the work of teaching during the current year. The average compensation of teachers is as follows:

	Males.	Females.
In townships	$1.99	$1.58
In towns	3.06	1.92
In cities	4.21	2.22

The number of colored schools in the state is 110; of district graded schools 344, and of township graded schools 164. There are 9,476 school houses in the state, of which 85 are built of stone, 1,598 brick, 7,640 frame, and 153 of the old style log houses still remain, as against 227 last year. The new school houses erected during the past twelve months number 413, and they are valued at $601,739. The total estimated value of school property is $11,376,729.

Spelling Reform Department.

Conducted by O. C. Blackmer, Director of the Northwestern Branch of the Spelling Reform Association.

THE SPELLING REFORM.—III.

The Prodigal Sun.—Luke xv. 11–20.

New letters used only for those they resembl in form.

11 A certain man had two sons:

12 And the younger of them said to his father, Father, give me the portion of goods that falleth to me. And he divided unto them his living.

13 And not many days after, the younger son gathered all together, and took his journey into a far country, and there wasted his substance with riotous living.

14 And, when he had spent all, there arose a mighty famine in that land, and he began to be in want.

15 And he went and joined himself to a citizen of that country, and he sent him into his fields to feed swine.

16 And he would fain have filled his belly with the husks that the swine did eat: and no man gave unto him.

17 And, when he came to himself, he said, How many hired servants of my father's have bread enough and to spare, and I perish with hunger.

18 I will arise and go to my father, and will say unto him, Father, I have sinned against heaven and before thee,

19 And am no more worthy to be called thy son: make me as one of thy hired servants.

20 And he arose and came to his father. But when he was yet a great way off, his father saw him, and had compassion on him, and ran, and fell on his neck, and kissed him.

Webster's Pronunshiashun in the alfabet ov the Asoshiashun.

11 A certin man had tu suns:

12 And the yungger ov them sed tu his father, Father, giv me the porshun ov guds that foleth tu me. And he divided untu them his living.

13 And not meni das after, the yungger sun gatherd al tugether, and tuk his jurni intu a far cuntri, and ther wasted his substanç with riutus living.

14 And, hwen he had spent al, ther aros a miti famin in that land, and he bigan tu be in wont.

15 And he went and joind himself tu a çitizen ov that cuntri, and he sent him intu his felds tu fed swin.

16 And he wud fan hav fild his beli with the husks that the swin did et: and no man gav untu him.

17 And, hwen he cam tu himself, he sed, Hau meni hird servants ov mi father's hav bred inuf and tu sper, and I perish with hungger.

18 I wil ari and go tu mi father, and wil sa untu him, Father, I hav sind agenst hevn and bifor the,

19 And am no mor wurthi tu be cold thi sun: mak me as wun ov thi hird servants.

20 And he aros and cam tu his father. But hwen he wos yet a grat wa of, his father so him, and had compashun on him, and ran, and fel on his nec, and kist him.

Practical Hints and Exercises.

OUR COUNTRY SCHOOLS.

Pearl Montrose.

WITH all due deference to our county superintendents, I must confess that in my opinion the too frequent inferior condition of the schools in our rural districts may be traced to the mistaken idea that "any one can teach school in the country."

"How did Miss Blank pass the examintion?" "Well, to tell the truth," responds the really conscientious official, "she failed in a number of the branches the first time, but she came again and raised her grade. I gave her a third grade for four months, which will take her through her term. She is to teach down in No. 5 on 'the Slough,' and you know they do not require a very advanced teacher there especially in the summer."

So the teacher (?) goes on her way rejoicing, and "No. 5" saves a few dollars by hiring her cheaply. A most lamentably false economy, for the children learn nothing useful, and drift into habits of listless indifference, or sly mischievous meanness, that will cling injuriously for years, possibly for life.

It may be that a teacher with a poor certificate can become a superior primary teacher, but give up the idea that they are fit to take charge of a country school. Give them positions in graded schools if you will, but send out to our rural districts men and women with good strong constitutions, cultured minds, and full to overflowing with the "milk of human kindness." If ideality is large, so much the better.

Beneath the rough exterior of the "bare-foot boy with cheek of tan," they can see if not a *statesman*, something far better, nobler, grander; they can see a true *man*, strong in future years to battle with error, to defend the right, a determined, self-reliant man, brave and generous, loving his country and reverencing the name of woman and of God, a man whose every impulse leads to noble action, to earnest thought, to pure words, a man who is not enslaved by tobacco, and is too brave to trifle with strong drink.

All this the teacher can hope for, and for all this he can labor with an intense earnestness that conquers destiny, and brings success in spite of every obstacle. Heaven knows there are districts where any refined man or woman would be as a missionary in a heathen land.

If, O teacher, you feel the utter fruitlessness of your toil; if you grow heartsick contemplating the ignorance and vice of the community in which you are laboring; do not slacken, but renew your zeal. Your efforts are not wasted.

Yet to succeed you must be thoroughly qualified for your work. The branches to be taught must be thoroughly understood by the instructor, or the blind leading the blind will result in ignominious failure.

Possibly some "new teacher" has discovered that he has mistaken his calling, and heroically sets to work to steer around all difficulties, exonerating himself by blaming former teachers with neglect of duty, thereby reducing the school to a condition beyond hope of redemption. A glance at the daily register will convince you that not all the fault rests upon your predecessor. The roll for summer contains the names of 25 or 30 pupils while you enroll 40 or 45 for the winter term. You are pledged to instruct them. You are not capable? Who is to blame for a teacher being in charge of a school without the necessary qualifications? Why are good, experienced teachers liable to be discharged and inferior teachers appointed to fill vacancies? Careless superintendents and ignorant directors.

Are you willing now to shake hands with me, "C. H."?

HOW TO TEACH GERMAN.—VIII.

By Dr. Zur Brücke.

A KINDERGARTEN EXERCISE. (A.) The little class, six boys and girls, sit before the teacher, saying, "*Ich falte die Arme; ich stehe auf.*" I fold the arms; I stand up. Now the teacher holds his hands, open about one half of a foot from the breast, the open hands being one inch apart. The teacher looking at his hands in this position, says, "*Ich halte die Hände so.*" All the pupils repeat, "*Ich halte die Hände so,*" until every one can say distinctly, "*Ich halte die Hände so,*" I hold the hands thus.

Again the teacher says, "*Ich klatsche in die Hände;*" all repeat, "*Ich klatsche in die Hände,*" till every member of the class can articulate distinctly, "*Ich klatsche in die Hände,*" I clap *into* the hands. At the word *klatschet!* all clap, till the teacher says, "halt!" Now the pupils may fold arms for a rest, saying, "*Ich falte die Arme.*" Again the teacher holds his hands open, and an inch apart as before, repeating, "*Ich halte die Hände so.*" All repeat after the teacher. "*Ich reibe mit den Händen,*" I rub with the hands; this is repeated till each pupil can say, "*Ich reibe mit den Händen.*" Then at the word "*reibet!*" all rub the hands briskly till the teacher says, "halt!"

The class, after being drilled in this way only five minutes, imitating the teacher, repeat, "*Ich falte die Arme,*" "*Ich sitze still auf meiner Bank:*" I sit still in my seat. "*Ich gebe Acht auf das, was der Lehrer sagt;*" I give attention to what the teacher says.

Under my instruction, Miss Quackenbush teaches one hundred children, primaries, daily, in the Englewood school, and with the most gratifying success. This class in one year has acquired several hundred words.

Turning over recently the handsome and excellently compiled Catalogue of the Muskegon (Mich.) public schools, we fell upon the following unique and striking suggestion: "To some the matter in a reading

book soon becomes old and devoid of interest; and when this is the case, these pupils lose interest in their reading. The only remedy I can suggest for this is a recommendation that additional reading matter be provided by the Board and furnished to certain classes of the lower grades without expense to the pupils. It has not escaped the observation of any teacher of reading classes in the primary schools that they can do much more than they are required or even allowed to do. It would be much better if pupils could read two or three Second Readers, instead of one. Again, there is so much difference in the ability of the teachers to instruct and pupils to learn, that in some cases two or three Readers could be completed in the same time where in others one is being completed. The cost of providing a sufficient number of duplicate Readers would be comparatively little. By changing such Readers from one school to another, a variety of reading matter can be provided which will greatly add to the efficiency of the teaching and to the pleasure and profit of the pupils. I therefore recommend the purchase of one hundred Second Readers, to be divided equally among four different series." This seems to us to be an excellent plan. Teachers too generally forget that reading is more than the recognition and pronouncing of words, and that reading closely "to the sense" is the main thing in the preparation of the child for busy life. The scheme suggested commends itself for general adoption in graded schools, as tending strongly to increase and maintain interest in the subject-matter of reading-books, and so in time, of all worthy literature.

H. A. F.

A THOROUGH STUDY OF NATURAL PHILOSOPHY.

SCIENTIFIC authorities have always been much in favor of a more general introduction of the study of natural philosophy into our schools. Prof. Tyndall's efforts in this direction are taking the first rank. His popular lectures and his various scientific manuals have added much to the general culture of our younger students. Prof. Tyndall, the worthy successor to Faraday, delivered about four years ago in New York some most interesting lectures on Light, Heat, Sound, Electricity, etc., which attracted the attention of the more refined and cultivated citizens. His easy vein of writing, as well as his clear demonstrations, comprehensible even to unscientific minds, we are familiar with, but in his late guide book, "Lessons in Electricity," his effort is to be even clearer than before, in order to make natural science suitable to the comprehension of children.

There can be no doubt that Prof. Tyndall has noticed a great lack of a thorough study of natural sciences in our country. Our schools indeed have not provided as yet for the proper method of introducing the almost indispensable study of Natural Philosophy. Prof. Tyndall points to the loss the world has suffered from a neglect of the art of experiment. It is desirable that our schools should adopt a course of studies, properly taught, such as are of unqestionable importance in practical life in our advanced days. The study of natural philosophy (physics) or the science of motives and powers which cause the various phenomena continually occurring in inorganic nature, will serve to lead to common sense. Old and young in general seem to take a remarkable interest almost instinctively, and ask for causes of these natural phenomena. Why not encourage such a desire of knowledge? A child naturally asks for the reason of thunder and lightning or other phenomena which happen to present themselves; are they always properly explained to the child?

As important and necessary as the study of physics is, this study has been much neglected. Experimental study is the only real study of this branch of science. The purchase of the costly apparatus necessary for illustrating various natural phenomena is no doubt a cause of the neglect to introduce more thoroughly this important study in the schools. Many of our higher schools teach natural philosophy in the higher classes, but are unable to illustrate matters properly from lack of necesssary apparatus, and much valuable time is consequently lost. Many matters may be easily explained without the aid of costly apparatus, but a thorough study is almost impossible. In his little volume, "Lessons in Electricity," Professor Tyndall earnestly urged the making of cheap electrical apparatus for the use of students, because without practical experimenting it is difficult to pursue the study of electrical phenomena profitably, while the ordinary apparatus of the lecture room is so costly that only large institutions can afford to purchase it. The above work will serve as an elementary guide-book for teacher and student, leading them to make their own instruments. As a valuable aid for self study, Tyndall's Lessons in Electricity must soon recommend themselves to all who are interested in this branch of natural science, and to all schools not prepared, as yet, for this important study. To attain that object the better and to make sure that no one shall throw aside the experiments for want of proper instruments, Tyndall has selected the cheapest articles to use in the investigations proposed. A price-list containg 58 various instruments and materials to accompany his Lessons will be found in the appendix of his volume and the whole collection of instruments for the complete illustration of every experiment described therein is sold for $55.00. In accordance with this suggestion, Curt. W. Meyer, of No. 14, Bible House, New York, mentioned in Tyndall's price-list as the manufacturer, has devised a set of apparatus, including everything needed for the making of all the experiments described in Prof. Tyndall's work. Curt. W. Meyer offers these cheap instruments to students and schools, singly or in complete set, at the above low price, so as to be in reach of almost every one.

Is it to be expected that a large interest will be taken by all in favor of advancement of natural sciences, especially by all our institutions not sufficiently provided with instruments. It is further desirable that such a laudable enterprise should soon find its deserved support, as at the prices fixed there can be almost no profit to the manufacturer, but the schools and students which need the apparatus will get the benefit of the enterprise. We ourselves commend the matter to the attention of teachers and students in the belief that Mr. Meyer's undertaking will forward the cause of elementary scientific study. W.

FREE TEXT-BOOKS.

FREE text-books means, virtually, a uniformity of text-books. By long experience and careful investigation, the Batavia, Ill., public schools upon both sides of Fox River have never had a desire to go back to the old method, but speak in the highest terms of their present system. For upward of sixteen years has this method of supplying books to the pupils in their public schools been in successful operation. Supt. Snow says that the cost is brought down to the very small sum of fifty cents per scholar for school books per year. They have an average attendance of 300 pupils; this would cost the district a tax of $150 to pay for their books. The same book does for many different pupils, each leaving it for his successor, as he is promoted to take a book just handed him by his predecessor. The books are well taken care of, and very seldom is one lost. Supt. Barry on the west side speaks in the same high terms of the system. No rental is charged the pupil for use of books. Having a school-book library seems to make an easy introduction to a general library of miscellaneous books which are of so much service in school work. We visited these libraries and schools and can pronounce the system excellent throughout.

A. H. P.

A teacher in Akron, Ohio, teaches little children to read after a new method, thus: The teacher prepares on some slips of cardboard some words which may be made the principal one in a short sentence, as, for instance, "dog.' The word is written and printed upon the slip so that the pupil may learn the elements of penmanship with reading and spelling. The scholars are taught to read, spell, and write this word until they have learned it thoroughly, and then another slip with the word "the" upon it is given them, and they are taught its meaning, use, and relation. Then the pupils are taught other words in the same way, and are taught to put the words together to make sentences. Thus in each new word that comes up the scholar is interested, and his interest is preserved all through.

A CROOKED STORY. Who will straighten it?

The buoys were at play over in the lain, rolling their whoops and tossing their bawls, and halling in their kites, for thee wind blue to hard too fly them hie. Some of them began to chute with beaux and arrows at a whole in the waul, and sum at the rose of current bushes near bye. Tom fell down and bumped his noes and hurt his I. Will picked hymn up and sett hymn on his feat and tolled him to bee more careful. Then they opened the gait and went into the would. The son shown warm and they picked flours and tried to clime the trees, and eight there lunch of bred and meet and pairs and plumbs. John found a rows which he took to his cozen. Soon the skye grew dark and it began to rein. It reigned so hard they were wet threw. There cotes were drenched and there hare dripped, and they had to run holm, and that was thee end of there fun that dey.

One of the questions at a written Scocth examination was, "What is a relative pronoun?" The answer was, "A relative pronoun is one that tells about your relatives and friends." This equals the reply—"There are three genders, the masculine, feminine, and neutral; masculine, men; feminine, women; and neutral old bachelors."

OFFICIAL DECISIONS.

ILLINOIS.

SUPERINTENDENT ETTER, in response to letters of inquiry concerning the construction to be placed upon the school law, has rendered the following decisions, which are of general interest. The substance of the inquiries and decisions is given:

Q. Can a county superintendent of schools date a certificate back of the time of examination?

A. A teacher's certificate must bear the same date as the examination, and cannot legally bear any other. The date of the examination and that of the certificate must agree on the books in the office of the Superintendent.

Q. Can a teacher be paid from the public school fund for services rendered without a legal certificate?

A. The fifty-second section of the school law says: "No teacher shall be entitled to any portion of the common school or township fund, or any other public fund, or be employed to teach any school under the control of any Board of Directors in this state, who shall not, at the time of his employment, have a certificate of qualification, obtained under the provisions of this act," etc. It is clear, from this language of the law, that the Directors have no authority given them to issue an order to a teacher in payment of services for teaching prior to the date of his certificate, nor can a Treasurer legally pay such an order if drawn by the Directors. Every teacher must possess a legal certificate, as a license to engage in the work of teaching in any public school. The law carefully guards the people's money, and both Directors and teachers must comply fully with its provisions before they can perform their several duties legally.

WISCONSIN.

Questions answered by State Superintendent Edward Searing.

Question—Can a district provide for the instruction of some of the children in another district?

Answer—No power is given to a district to make such provision. If certain children can be better accommodated in another district, let the districts be altered if practicable. The true solution of such difficulties is the adoption of the town system.

Question—How can a district obtain a site needed, when the owner of the land is too sick to do business?

Answer—The law makes no provision for such a case. In case of non-residence of the owner, the Town Board can act (Section 78).

Question—Can a district which has borrowed money of the state be altered before the debt is paid?

Answer—Yes, with the consent of the Land Commissioners. (Chapter 128, laws of 1877).

Question—If a district officer moves out of the district, but not out of the town, can he still act, and will his acts be valid?

Answer—No, he loses the office if he changes his district residence.

Question—I was elected Treasurer, the vote was put "for three years" when it should have been "two years," the balance of an unexpired term. Is my election invalid?

Answer—The error in the wording of the motion does not render the election invalid.

Qustion—Does a District Clerk lose his office by failing for 21 days to call for the records?

Answer—He does not.

INDIANA.

A Justice of the Peace is not debarred from teaching.

A teacher has the right to arrange a course of study, with the consent of the trustee, and compel a pupil to conform to it.

For refusal to obey the rules a pupil may be suspended by the teacher, with the consent of the trustee.

THE GERMAN LANGUAGE IN PUBLIC SCHOOLS.

TO THE EDITOR OF THE TEACHER:

In a certain school district in this county the school is conducted in the forenoon in English, and in the afternoon in German. This of course caused dissatisfaction on the part of American families, and consequently complaint was made to the township treasurer, who was asked to withhold the teacher's salary until the affair could be adjusted. The treasurer referred the matter to me, whereupon I made a statement of the case to State Superintendent S. M. Etter requesting his decision, which I have to-day received, and is as follows:

"The school must in every respect be an English school, and cannot be converted into a strictly German school for a portion of the day. German can be taught under the Law in the schools, and while the recitations are being heard the German language can be used, but to make it entirely German for one half the day is not legal."

Thinking that might, perhaps, be of general interest to teachers and school officers throughout the state, and at the suggestion of your general agent, Mr. Porter, I submit it to you for publication.

J. R. HAGGARD.
Co. Supt. Schools.

DOWNER'S GROVE, DU PAGE CO., ILL., DEC. 14, '77.

FACTS FOR TEACHERS.

THE population of Richmond, Va., has doubled since the war, and her manufactories now number 361. The sales in 1876 reached the sum of $22,424,800, her wheat and corn mills producing $2,857,000, her forty-one tobacco factories $12,037,300, and her iron works $2,032,780.

—Barbadoes, first settled by the English in 1624, is described by a recent very observant visitor as the only West India colony where British stock has taken firm root and where British institutions have thriven. Of its 167,000 souls, there were reckoned in 1871 16,560 whites to 39,578 mulattoes and 105,904 blacks; which is at the rate or nearly 1 white to 6 blacks, while in Jamaica the rate is 1 to 30, and in British Guiana 1 to 100. Nearly all the whites are natives, and many can trace from settlers of the time of Charles I. Yet even here, with a dry, salubrious, bracing atmosphere, unvisited by malaria and refreshed by constant northeast winds, the Anglo-Saxon degenerates without frequent reinforcement of blood from England. In the other West India islands he is seen to far less advantage. It is to be borne in mind that in the palmy days of Jamaica the planters were usually absentees during at least a third of their lives.

—An exchange says that four-fifths of the population of Spain are unable to read.

Publishers' Department.

BACK NUMBERS of the WEEKLY, from one to twenty inclusive, will be furnished for five cents each. All published since No. 20, ten cents each. Any who have extra copies of Nos. 45 or 47 will confer a favor on us by returning them. We will extend their subscription one week for each copy so returned.

If notice is sent us of a missing number immediately on receipt of the *next* number, we will mail it free. Always give the *number* of the paper, not the date.

In ordering a change in the address of your paper, always give the postoffice and state *from* which you wish the address changed.

TERMS OF SUBSCRIPTION.

$2.50 per year (50 Nos.); $1.50 per volume (25 Nos.). In clubs of five $2.25 and $1.35. In clubs of ten, $2.00 and $1.20. Three months on trial, 60 cents. Sent to Public Libraries and Reading Rooms for $2.00 a year. Payment invariably in advance.

The last number paid for by each subscriber is on the address-label. The paper will not be sent beyond that number unless the subscription is renewed, which should be done two weeks in advance.

Remittances should be sent by registered letter, draft, check, or P. O. money order payable to S. R. WINCHELL & Co.

TERMS OF ADVERTISING.

Per line, agate measure, 10 cents each insertion. When a special location is chosen, 12 cents a line. Special Notices, 25 cents a line.

Special rates for twelve, six, and three months' contracts. Orders from strangers must be paid monthly in advance.

Copy should be received by Saturday noon, previous to date of issue.

Each advertising page of THE EDUCATIONAL WEEKLY contains three columns, each column ten inches, and one inch fourteen lines.

No advertisement will be inserted for less than one dollar.

Address all communications to

THE EDUCATIONAL WEEKLY,
170 Madison St., Chicago.

OUR CLUBBING LIST.

THE clubbing list published in the advertising columns of the WEEKLY furnishes an index to some the most valuable American periodicals. Subscriptions are being sent in at clubbing rates quite freely, and it has occured to us that a word of information or opinion respecting such as have been received at our office during the past year may not be unacceptable to our readers.

Of the educational monthlies, the list contains the names of only the best. Each has a local character except *Barnes' Educational Monthly*. *The Eclectic Teacher* is not confined to a single state, but represents the whole South, and is included in the list because it is the only really southern journal devoted to the interests of education. If a teacher can afford it, he should take, besides one of the weeklies, either *Barnes' Educational Monthly*, *The Primary Teacher*, or one of the state journals. The *American Journal of Education* is less local in character than the others, and is a very vigorous and lively journal, as is indicated by the selections we have made from its columns. Of the magazines, we have received all except the *Eclectic*. Those of a popular character are pretty well known, *Harper's* is most popular; we confess a preference for *Scribner's*. The *North American Review* makes a good library. The *Popular Science Monthly* every teacher should have, as well as every high school and academy. *St. Nicholas*, *Wide Awake*, and the *Nursery* are simply indispensable in a family where there are young folks to read and learn, and the *Youth's Companion* has been improving for the last *fifty years*. No one ever repents having subscribed for that gem of a weekly. *Appleton's Journal* and the *Scientific American* are new-comers to our table, but their value is unquestioned—the latter being a weekly of large circulation. Both are finely illustrated.

Every one will select his own religious paper in spite of our advice, and probably also his political, though there are certain features of those named in our list, which make them particularly valuable to teachers. The Chicago *Weekly Journal* has a five-column educational department which is conducted with ability. The *Inter-Ocean* is the most popular west of New York, and has an immense circulation. Notice our special combination with that and Webster's Unabridged. The N. Y. *Tribune* and *Post* have long held a rank among the best of political weeklies for teachers. *Littell's Living Age* is a weekly magazine of selected and original literature, which very many will have in spite of its high price. It is first class in every respect.

There are other excellent journals not included in the list because they are new and not yet much in demand; of an elocutionary character are the *Atheneum*, of Springfield, Ill., published monthly at $1.50 a year, and *Good Times*, a monthly of less dignity, but more variety, especially for schools. The *New Education* is devoted to kindergarten instruction, the only journal of its kind now published in this country.